

Please insert the following Abstract in the above-identified application:

**Abstract**

A centrifugal evaporator comprises a chamber in which sample containers are carried and rotated by a rotor and are pivotally mounted so as to swing up to a substantially horizontal orientation as the rotor rotates. The evaporator includes an infra-red source to direct infra-red radiation towards the rotor and the sample containers carried thereon, to heat at least the latter and any sample material therein. A non-contact temperature sensing infra-red pyrometer having a sensor with a defined field of view is mounted in the chamber, such that while the rotor as such is substantially out of its field of view, each sample container at least partly occupies the pyrometer field of view for a part of each rotation of the rotor. The positions of the infra-red source and the pyrometer components are selected so that the radiation from the infra-red source does not impinge on the pyrometer sensor.